

J. Lindgren

7 Pfanner 11-27-00
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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/535,088

DATE: 11/03/2000
TIME: 13:20:58

Input Set : A:\Zfp-us.app
Output Set: N:\CRF3\11032000\I535088.raw

3 <110> APPLICANT: EISENBERG, STEPHEN P.
4 CASE, CASEY C.
5 COX III, GEORGE N.
6 JAMIESON, ANDREW
7 REBAR, EDWARD J.
8 LUI, QIANG
10 <120> TITLE OF INVENTION: ZINC FINGER PROTEIN COMPOSITIONS
12 <130> FILE REFERENCE: 019496-003020US
14 <140> CURRENT APPLICATION NUMBER: 09/535,088.
15 <141> CURRENT FILING DATE: 2000-03-23
17 <150> PRIOR APPLICATION NUMBER: 60/126,238
18 <151> PRIOR FILING DATE: 1999-03-24
20 <150> PRIOR APPLICATION NUMBER: 60/126,239
21 <151> PRIOR FILING DATE: 1999-03-24
23 <150> PRIOR APPLICATION NUMBER: 60/146,596
24 <151> PRIOR FILING DATE: 1999-07-30
26 <150> PRIOR APPLICATION NUMBER: 60/146,615
27 <151> PRIOR FILING DATE: 1999-07-30
29 <160> NUMBER OF SEQ ID NOS: 4054
31 <170> SOFTWARE: PatentIn Ver. 2.1
33 <210> SEQ ID NO: 1
34 <211> LENGTH: 25
35 <212> TYPE: PRT
36 <213> ORGANISM: Artificial Sequence
38 <220> FEATURE:
39 <223> OTHER INFORMATION: Description of Artificial Sequence: exemplary motif
41 <220> FEATURE:
42 <221> NAME/KEY: MOD_RES
43 <222> LOCATION: (2)..(5)
44 <223> OTHER INFORMATION: this region may encompass two to four residues
45 consisting of any amino acid
47 <220> FEATURE:
48 <221> NAME/KEY: MOD_RES
49 <222> LOCATION: (7)..(18)
50 <223> OTHER INFORMATION: any amino acid
52 <220> FEATURE:
53 <221> NAME/KEY: MOD_RES
54 <222> LOCATION: (20)..(24)
55 <223> OTHER INFORMATION: this region may encompass three to five residues
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60 1 5 10 15
W--> 62 Xaa Xaa His Xaa Xaa Xaa Xaa Xaa His
63 20 25
66 <210> SEQ ID NO: 2
67 <211> LENGTH: 5

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68 <212> TYPE: PRT
69 <213> ORGANISM: Artificial Sequence
71 <220> FEATURE:
72 <223> OTHER INFORMATION: Description of Artificial Sequence: peptide linker
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79 <210> SEQ ID NO: 3
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81 <212> TYPE: PRT
82 <213> ORGANISM: Artificial Sequence
84 <220> FEATURE:
85 <223> OTHER INFORMATION: Description of Artificial Sequence: peptide linker
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88 Gly Gly Gly Ser
89 1 5
92 <210> SEQ ID NO: 4
93 <211> LENGTH: 8
94 <212> TYPE: PRT
95 <213> ORGANISM: Artificial Sequence
97 <220> FEATURE:
98 <223> OTHER INFORMATION: Description of Artificial Sequence: peptide linker
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102 1 5
105 <210> SEQ ID NO: 5
106 <211> LENGTH: 9
107 <212> TYPE: PRT
108 <213> ORGANISM: Artificial Sequence
110 <220> FEATURE:
111 <223> OTHER INFORMATION: Description of Artificial Sequence: peptide linker
113 <400> SEQUENCE: 5
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115 1 5
118 <210> SEQ ID NO: 6
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120 <212> TYPE: PRT
121 <213> ORGANISM: Artificial Sequence
123 <220> FEATURE:
124 <223> OTHER INFORMATION: Description of Artificial Sequence: peptide linker
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127 Leu Arg Gln Lys Asp Gly Gly Ser Glu Arg Pro
128 1 5 10
131 <210> SEQ ID NO: 7
132 <211> LENGTH: 16
133 <212> TYPE: PRT
134 <213> ORGANISM: Artificial Sequence
136 <220> FEATURE:
137 <223> OTHER INFORMATION: Description of Artificial Sequence: peptide linker

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Input Set : A:\Zfp-us.app
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139 <400> SEQUENCE: 7
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141      1           5          10          15
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146 <212> TYPE: PRT
147 <213> ORGANISM: Artificial Sequence
149 <220> FEATURE:
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153 <221> NAME/KEY: MOD_RES
154 <222> LOCATION: (2)..(5)
155 <223> OTHER INFORMATION: this region may encompass two to four residues
156          consisting of any amino acid
158 <220> FEATURE:
159 <221> NAME/KEY: MOD_RES
160 <222> LOCATION: (7)..(18) /
161 <223> OTHER INFORMATION: any amino acid
163 <220> FEATURE:
164 <221> NAME/KEY: MOD_RES
165 <222> LOCATION: (20)..(24)
166 <223> OTHER INFORMATION: this region may encompass three to five residues
167          consisting of any amino acid
169 <400> SEQUENCE: 8
W--> 170 Cys Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
171      1           5          10          15
W--> 173 Xaa Xaa His Xaa Xaa Xaa Xaa Xaa His
174      20          25
177 <210> SEQ ID NO: 9
178 <211> LENGTH: 30
179 <212> TYPE: PRT
180 <213> ORGANISM: Artificial Sequence
182 <220> FEATURE:
183 <223> OTHER INFORMATION: Description of Artificial Sequence: mouse transcription
184          factor Zif268
186 <400> SEQUENCE: 9
187 Tyr Ala Cys Pro Val Glu Ser Cys Asp Arg Arg Phe Ser Arg Ser Asp
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191      20          25          30
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195 <211> LENGTH: 28
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200 <223> OTHER INFORMATION: Description of Artificial Sequence: mouse transcription
201          factor Zif268
203 <400> SEQUENCE: 10
204 Phe Gln Cys Arg Ile Cys Met Arg Asn Phe Ser Arg Ser Asp His Leu

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Input Set : A:\Zfp-us.app
Output Set: N:\CRF3\11032000\I535088.raw

205 1 5 10 15
207 Thr Thr His Ile Arg Thr His Thr Gly Glu Lys Pro
208 20 25
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213 <212> TYPE: PRT
214 <213> ORGANISM: Artificial Sequence
216 <220> FEATURE:
217 <223> OTHER INFORMATION: Description of Artificial Sequence: mouse transcription
218 factor Zif268
220 <400> SEQUENCE: 11
221 Phe Ala Cys Asp Ile Cys Gly Arg Lys Phe Ala Arg Ser Asp Glu Arg
222 1 5 10 15
224 Lys Arg His Thr Lys Ile His Leu Arg Gln Lys
225 20 25
228 <210> SEQ ID NO: 12
229 <211> LENGTH: 9
230 <212> TYPE: DNA
231 <213> ORGANISM: Artificial Sequence
233 <220> FEATURE:
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243 <213> ORGANISM: Artificial Sequence
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247 transcription factor
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250 Pro Gly Lys Lys Gln His Ile Cys His Ile Gln Gly Cys Gly Lys
251 1 5 10 15
253 Val Tyr Gly Lys Thr Ser His Leu Arg Ala His Leu Arg Trp His Thr
254 20 25 30
256 Gly Glu Arg Pro Phe Met Cys Thr Trp Ser Tyr Cys Gly Lys Arg Phe
257 35 40 45
259 Thr Arg Ser Asp Glu Leu Gln Arg His Lys Arg Thr His Thr Gly Glu
260 50 55 60
262 Lys Lys Phe Ala Cys Pro Glu Cys Pro Lys Arg Phe Met Arg Ser Asp
263 65 70 75 80
265 His Leu Ser Lys His Ile Lys Thr His Gln Asn Lys Lys Gly
266 85 90
269 <210> SEQ ID NO: 14
270 <211> LENGTH: 9
271 <212> TYPE: DNA
272 <213> ORGANISM: Artificial Sequence
274 <220> FEATURE:
275 <223> OTHER INFORMATION: Description of Artificial Sequence: target DNA

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/535,088

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TIME: 13:20:58

Input Set : A:\Zfp-us.app
Output Set: N:\CRF3\11032000\I535088.raw

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286 <220> FEATURE:
287 <223> OTHER INFORMATION: Description of Artificial Sequence: Sp-1 consensus
288 sequence
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292 1 5 10 15
294 His Ala Cys Pro Glu Cys Gly Lys Ser Phe Ser Lys Ser His Leu
295 20 25 30
297 Arg Ala His Gln Arg Thr His Thr Gly Glu Arg Pro Tyr Lys Cys Pro
298 35 40 45
300 Glu Cys Gly Lys Ser Phe Ser Arg Ser Asp Glu Leu Gln Arg His Gln
301 50 55 60
303 Arg Thr His Thr Gly Glu Lys Pro Tyr Lys Cys Pro Glu Cys Gly Lys
304 65 70 75 80
306 Ser Phe Ser Arg Ser Asp His Leu Ser Lys His Gln Arg Thr His Gln
307 85 90 95
309 Asn Lys Lys Gly
310 100
313 <210> SEQ ID NO: 16
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315 <212> TYPE: DNA
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318 <220> FEATURE:
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328 <212> TYPE: DNA
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332 <223> OTHER INFORMATION: Description of Artificial Sequence: example target.
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340 <211> LENGTH: 9
341 <212> TYPE: DNA
342 <213> ORGANISM: Artificial Sequence
344 <220> FEATURE:
345 <223> OTHER INFORMATION: Description of Artificial Sequence: example target
346 DNA

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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/535,088

DATE: 11/03/2000
TIME: 13:20:59

Input Set : A:\Zfp-us.app
Output Set: N:\CRF3\l1032000\I535088.raw

L:59 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:62 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:170 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:173 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:52293 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4013
L:52316 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4014
L:52339 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4015
L:52362 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4016
L:52385 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4017
L:52408 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4018
L:52431 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4019
L:52454 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4020
L:52477 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4021
L:52500 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4022
L:52523 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4023
L:52546 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4024
L:52569 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4025
L:52592 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4026
L:52615 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4027
L:52638 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4028
L:52661 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4029
L:52684 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4030
L:52707 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4031
L:52730 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4032
L:52753 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4033
L:52776 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4034
L:52799 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4035
L:52822 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4036
L:52845 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4037
L:52868 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4038
L:52891 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4039
L:52914 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4040
L:52937 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4041
L:52960 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4042
L:52983 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4043
L:53006 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4044
L:53029 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4045
L:53052 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4046
L:53075 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4047
L:53098 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4048
L:53121 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4049
L:53144 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4050
L:53167 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4051
L:53190 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4052
L:53213 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4053
L:53236 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4054